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Substitute for form 1449/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

	Complete if Known				
	Application Number	10/581,761			
	Filing Date	April 10, 2008			
	First Named Inventor	Mats Hellstrom et al.			
	Art Unit				
	Examiner Name				
_	Attorney Docket Number	102959-202			

			U. S. PATENT	DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	-	Number-Kind Code <sup>2 (if known)</sup>	00.05.0004	Ohata Darai at at	, (galles / ppea)
	1.	<sup>US-</sup> 6,242,179 B1	06-05-2001	Shah, Purvi et al.	
	2.	<sup>US-</sup> 5,602,307	02-11-1997	Beaudet, Arthur L. et al.	
	3.	<sup>US-</sup> 5,489,743	02-06-1996	Robinson, Murray O. et al.	
	4.	<sup>US-</sup> 2003/0203843 A1	10-30-2003	Pena, Carol E. A. et al.	
	5.	US- 2003/0100497 A1	05-29-2003	Baker, Kevin P. et al.	
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		Country Code <sup>3 -</sup> Number <sup>4 -</sup> Kind Code <sup>5</sup> (if known)	MM-DD-YYYY		Or Relevant Figures Appear	T⁵
	6.	WO 2003/079982 A2	10-02-2003	Li, Jing et al.		
	7.	WO 2003/072827 A1	09-04-2003	Hirsch, Raphael et al.		
	8.	WO 2003/046578 A2	06-05-2003	Chibout, Salah-Dine et al		
	9.	WO 2003/026403 A2	04-03-2003	Wisotzkey, Robert G et al		
	10.	WO 2002/094780 A2	11-28-2002	Yue, Henry et al.		
	11.	WO 2002/079492 A2	10-10-2002	Murray, Richard et al.		

Examiner	Date	
Signature	Considered	

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Complete if Known Substitute for form 1449/PTO Application Number 10/581,761 Filing Date April 10, 2008 INFORMATION DISCLOSURE First Named Inventor Mats Hellstrom et al. STATEMENT BY APPLICANT Art Unit (Use as many sheets as necessary) Examiner Name Attorney Docket Number 102959-202 Sheet

Examiner	Cite	Document Number	U. S. PATENT D	Name of Patentee or	Pages, Columns, Lines, Where
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			MM-DD-YYYY			
	12.	WO 1998/46830 A1	10-22-1998	Valtanen, Jarkko		
	13.	EP 1 347 059 A1	09-24-2003	Lubbert, Hermann et al.		Г
	14.	EP 1 114 862 A1	07-11-2001	Wolf, Eckard et al.		
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24. BOUKHELIFA M. ET AL., "Palladin, a novel cytoskeleton associated protein involved in neural maturation", SOCIETY FOR NEUROSCIENCE ABSTRACTS, Vol. 26, No. 1-2, Abstract No. 314.7 (2000).

Examiner

Date

Considered

NASEVICIUS, AIDAS ET AL., "Effective targeted gene 'knockdown' in zebrafish", NATURE

DEUSSING, JAN ET AL., "Murine and human cathepsin Z: cDNA-cloning, characterization of the genes and chromosomal localization", BIOCHIMICA ET BIOPHYSICA ACTA, Vol. 1491, Pages

22.

23.

GENETICS, Vol. 26 (October 2000).

93-106 (2000).

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Complete if Known Application Number 10/581,761 INFORMATION DISCLOSURE April 10, 2008 Filing Date STATEMENT BY APPLICANT First Named Inventor Mats Hellström et al. Art Unit Examiner Name 102959-202 Sheet 4 of 5 Attorney Docket No. NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title Cite **EXAMINER** of the item (book, magazine, journal, etc.), date, page(s), volume-issue number(s), publisher, city No. INITIAL\* and/or country where published T<sup>2</sup> ZHU, ZHENPING ET AL., "Inhibition of tumor growth and metastasis by targeting tumor-associate 25. angiogenesis with antagonists to the receptors of vascular endothelial growth factor", INVESTIGATIONAL NEW DRUGS, Vol. 17, Pages 195-212 (1999). KAI, MASAHIRO ET AL., "Cloning and characterization of two human isozymes of Mg2+ 26. independent phosphatidic acid phosphatases", THE JOURNAL OF BIOLOGICAL CHEMISTRY, Vol. 272, No. 38, Pages 24572-24578 (1997). KAI, MASAHIRO ET AL., "Identification and CDNA cloning of 35-KDA phosphatidic acid 27. phosphatase (type2) bound to plasma membranes", THE JOURNAL OF BIOLOGICAL CHEMISTRY, Vol. 271, No. 31, Pages 18931-18938 (1996). INNIS MICHAEL A. ET AL., "Optimization of PCRs - PCR Protocols, A Guide to Methods and 28. Applications", ACADEMIC PRESS, INC. (1990). Database EPO Proteins (online) Accession No. CQ896404, HINZMANN, B. ET AL., "Human 29. nucleic acid sequences obtained from prostatic carcinomas", 5 November 2004 (2004-11-05). Database EMBL (online) Accession No. CG597335, ZAMBROWICZ, B. P. ET AL., "Wnkl 30. kinase deficiency lowers blood pressure in mice: a gene-trap screen to identify potential targets for therapeutic intervention", 8 October 2003 (2003-10-08). Database EMBL (online) Accession No. CD541309, PIAO, Y. ET AL., "Construction of long-31. transcript enriched cDNA libraries from submicrogram amounts of total RNAs by a universal PCR amplification method", 12 June 2003 (2003-06-12). Database EMBL (online) Accession No. AK088577, ADACHI, J. ET AL., "The transcriptional 32. landscape of the mammalian genome, "19 December 2002 (2002-12-19). 33. Database EMBL (online) Accession No. AX140435, WOLF, E. ET AL, "Use of polypeptides or their encoding nucleic acids for the diagnosis or treatment of skin diseases and their use in identifying pharmacologically active substances", 31 May 2001 (2001-05-31). Examiner Date Considered Signature: \*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through if not considered. Include copy of this form with next communication to applicant.

PTO/SB/08b(02-09)

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